

Category Budget

Budget Category Item	PIER Share (\$)	Match Share (\$)	Total Cost (\$)
Personnel:			
Direct Labor	\$ 126,829	\$ 4,121	\$ 130,950
Fringe Benefits	\$ 37,039	\$ 1,302	\$ 38,341
Total Personal Services	\$ 163,868	\$ 5,423	\$ 169,291
Operating Expenses:			
Travel	\$ 4,500	\$ -	\$ 4,500
Equipment	\$ -	\$ -	\$ -
Materials/Supplies	\$ 55,176	\$ -	\$ 55,176
Contractual	\$ 570,032	\$ -	\$ 570,032
Miscellaneous	\$ -	\$ 1,000	\$ 1,000
Total Operating Expense:	\$ 629,708	\$ 1,000	\$ 630,708
Overhead:			
Overhead	\$ -	\$ -	\$ -
Total Overhead	\$ -	\$ -	\$ -
Total	\$ 793,576	\$ 6,423	\$ 799,999

BUDGET DETAILS

Direct Labor, Unloaded Hourly Rates

Title / Job Classification	Maximum Rate to be Billed* (\$ / Hr)	Number of Hours	PIER Share	Match Share	Total Cost
Local Government Management	\$ 62.58	814.65	\$ 46,860	\$ 4,121	\$ 50,981
Principal Investigator	\$ 77.67	561.60	\$ 43,619	\$ -	\$ 43,619
Project Manager	\$ 77.67	468.00	\$ 36,350	\$ -	\$ 36,350
Lipid-Chemist	\$ 36.40	2,818.40	\$ 102,596	\$ -	\$ 102,596
Local Government Management	\$ 24.44	868.40	\$ 21,226	\$ 4,133	\$ 25,359
Mechanical Engineer	\$ 65.05	374.40	\$ 24,354	\$ -	\$ 24,354
Oceanographic Technician	\$ 24.27	2,818.40	\$ 68,397	\$ -	\$ 68,397
Principal Investigator	\$ 65.01	398.67	\$ 25,918	\$ -	\$ 25,918
Project Manager	\$ 29.20	3,537.73	\$ 103,307	\$ -	\$ 103,307
Project Systems Engineer	\$ 38.93	3,355	\$ 130,603	\$ -	\$ 130,603
Wastewater Engineer	\$ 48.66	1,702	\$ 82,830	\$ -	\$ 82,830
Total Direct Labor			\$ 126,829	\$ 4,121	\$ 130,950

* Maximum salary rates are caps: PIER will not reimburse at a higher rate over the term of the project.

Fringe Benefits

Title / Job Classification	Maximum % Rate to be Billed*	Base (typically Total Direct Labor)	PIER Share	Match Share	Total Cost
Local Government Management	31.6%	\$46,860	\$ 14,808	\$ 1,302	\$ 16,110
Principal Investigator	27.8%	\$43,619	\$ 12,126	\$ -	\$ 12,126
Project Manager	27.8%	\$36,350	\$ 10,105	\$ -	\$ 10,105
Lipid-Chemist	23.8%		\$ 32,044	\$ -	\$ 32,044
Local Government Management	23.8%		\$ 6,631	\$ 1,290	\$ 7,921
Mechanical Engineer	23.8%		\$ 7,607	\$ -	\$ 7,607
Oceanographic Technician	23.8%		\$ 21,363	\$ -	\$ 21,363
Principal Investigator	23.8%		\$ 8,095	\$ -	\$ 8,095
Project Manager	23.8%		\$ 32,266	\$ -	\$ 32,266
Project Systems Engineer	23.8%		\$ 40,792	\$ -	\$ 40,792
Wastewater Engineer	23.8%		\$ 25,871	\$ -	\$ 25,871
Total Fringe Benefits			\$ 37,039	\$ 1,302	\$ 38,341

* Maximum fringe benefit rates are caps: PIER will not reimburse at a higher rate over the term of the project.

Travel**

Location	Purpose	Number of Trips	People per Trip	PIER Share*	Match Share	Total Cost
Mountain View to Sacramento	Mileage for travel from Mountain View to Sacramento, 2 overnights in hotel for 2 CPR Meetings and one overnight for kickoff	3	2	\$ 2,000	\$ -	\$ 2,000
Mountain View to Sacramento	Mileage for travel from Mountain View to Sacramento, CA. Overnight in hotel for 4 people for Final Meeting	1	4	\$ 2,500	\$ -	\$ 2,500
Final Meeting Travel	Mileage for travel from Mountain View to Sacramento, CA. Overnight in hotel for 4 people.	1	4	\$ 2,000	\$ -	\$ 2,000
Project Manager travel	Mileage for travel from Mountain View to Sacramento, 2 overnights in hotel for 2 CPR Meetings and one overnight for kickoff meeting	3	2	\$ 2,500	\$ -	\$ 2,500
Total Travel				\$ 4,500	\$ -	\$ 4,500

BUDGET DETAILS

* PIER Share: Travel is reimbursed at State rates. Higher travel costs can count as Match Share.

** Trips listed as "to be determined (TBD)" require advanced written approval from Commission Project Manager.

Materials, Supplies

Item	Quantity	Unit Cost	PIER Share	Match Share	Total Cost
FO Membrane		\$ 10,000.00	\$ 10,000	\$ -	\$ 10,000
CO2 Infrastructure		\$ 4,000.00	\$ 4,000	\$ -	\$ 4,000
Waterproof Portable pH measuring Device		\$ 1,900.00	\$ 1,900	\$ -	\$ 1,900
Plastic + Gas Membrane		\$ 10,000.00	\$ 10,000	\$ -	\$ 10,000
Waste Water Testing Supplies		\$ 1,500.00	\$ 1,500	\$ -	\$ 1,500
Cell Counting: Hemocytometer		\$ 450.00	\$ 450	\$ -	\$ 450
Heat Sealers		\$ 2,500.00	\$ 2,500	\$ -	\$ 2,500
Artificial Lighting and Light Meter		\$ 3,147.00	\$ 3,147	\$ -	\$ 3,147
Flow Meters		\$ 800.00	\$ 800	\$ -	\$ 800
Temperature Probes		\$ 350.00	\$ 350	\$ -	\$ 350
Handheld Digital Camera (weather proof and strobe light)		\$ 1,107.00	\$ 1,107	\$ -	\$ 1,107
Balance		\$ 1,000.00	\$ 1,000	\$ -	\$ 1,000
Magnetic stirrer		\$ 200.00	\$ 200	\$ -	\$ 200
Wavemaker device		\$ 3,200.00	\$ 3,200	\$ -	\$ 3,200
Consumables (lab supplies)		\$ 14,856.00	\$ 14,856	\$ -	\$ 14,856
Bottles for Centrifuge		\$ 166.00	\$ 166	\$ -	\$ 166
Chiller		\$ 4,500.00	\$ 4,500	\$ -	\$ 4,500
Heat Sealer		\$ 4,800.00	\$ 4,800	\$ -	\$ 4,800
Tanks		\$ 1,000.00	\$ 1,000	\$ -	\$ 1,000
Wave Machine		\$ 1,000.00	\$ 1,000	\$ -	\$ 1,000
Mooring hardware		\$ 3,000.00	\$ 3,000	\$ -	\$ 3,000

Total Materials and Supplies	\$ -	\$ -	\$ 55,176
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Equipment

Item	Quantity	Unit Cost	PIER Share	Match Share	Total Cost
Forward Osmosis Membrane		\$ 5,000.00	\$ 5,000	\$ -	\$ 5,000
Materials		\$ 11,500.00	\$ 11,500	\$ -	\$ 11,500
pH Meter & 4 probes		\$ 8,376.00	\$ 8,376	\$ -	\$ 8,376
Plastic + Gas Membrane		\$ 10,000.00	\$ 10,000	\$ -	\$ 10,000
Mooring supplies		\$ 6,000.00	\$ 6,000	\$ -	\$ 6,000
Total Equipment			\$ -	\$ -	\$ -

Contractual

Subcontractor Name	Purpose	PIER Share	Match Share	Total Cost
SETI	Algae Research, Lipids, and Experimentation	\$ 265,730	\$ -	\$ 265,730
USRA	Lab & Outdoor Technical Support	\$ 121,485	\$ -	\$ 121,485
TBD	Outdoor Wet Labs & Support, Wastewater, Phycology	\$ 23,000	\$ -	\$ 23,000
TBD	Phycologist and Mechanical Engineer	\$ 159,817	\$ -	\$ 159,817
		\$ -	\$ -	\$ -
Total Contractual		\$ 570,032	\$ -	\$ 570,032

BUDGET DETAILS

Miscellaneous

Item	Purpose	PIER Share	Match Share	Total Cost
Permit Cost		\$ -	\$ 1,000	\$ 1,000
		\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -
Total Miscellaneous		\$ -	\$ 1,000	\$ 1,000

Overhead

Name of Overhead	Overhead Base*	Maximum % Rate to be Billed**	Base Cost	PIER Share	Match Share	Total Cost
		0%			\$ -	
		0%	\$ -	\$ -	\$ -	\$ -
		0%	\$ -	\$ -	\$ -	\$ -
		0%	\$ -	\$ -	\$ -	\$ -
		0%	\$ -	\$ -	\$ -	\$ -
Total Overhead				\$ -	\$ -	\$ -

* Base: Define cost categories used to charge Overhead rate, e.g., Total Labor, Total Direct Cost, Materials, Subcontracts, etc.

** Maximum Indirect Overhead rates are caps: PIER will not reimburse at higher rates over the term of the project.

SUMMARY BUDGET BY TASK

Task #	Task Name	PIER Funding (\$)	Match Funding (\$)	Total (\$)
1.1	Attend Kick-off Meeting	\$1,364	\$0	\$1,364
1.1	Attend Kick-off Meeting	\$1,176	\$0	\$1,176
1.2	Critical Project Review Meetings	\$4,557	\$0	\$4,557
1.2	Critical Project Review Meetings	\$4,000	\$0	\$4,000
1.3	Final Meeting	\$3,632	\$0	\$3,632
1.3	Final Meeting	\$3,277	\$0	\$3,277
1.4	Monthly Progress Reports	\$21,460	\$0	\$21,460
1.4	Monthly Progress Reports	\$16,792	\$0	\$16,792
1.5	Final Report	\$12,885	\$0	\$12,885
1.5	Final Report	\$10,082	\$0	\$10,082
1.6	Identify & Obtain Matching Funds	\$0	\$0	\$0
1.6	Identify & Obtain Matching Funds	\$0	\$0	\$0
1.7	Identify & Obtain Required Permits	\$0	\$6,423	\$6,423
1.7	Identify & Obtain Required Permits	\$0	\$6,423	\$6,423
1.8	Establish the PAC (optional)	\$0	\$0	\$0
1.8	Establish the PAC (optional)	\$0	\$0	\$0
1.9	Conduct PAC Meetings (optional)	\$0	\$0	\$0
1.9	Conduct PAC Meetings (optional)	\$0	\$0	\$0
2.1	Set up Wet Lab & Outdoor Tanks	\$156,703	\$0	\$156,703
2.1	Set up Wet Lab & Outdoor Tanks	\$136,832	\$0	\$136,832
2.2	Milestone 1, OMEGA Integrity Tests	\$131,177	\$0	\$131,177
2.2	Milestone 1, OMEGA Integrity Tests	\$127,136	\$0	\$127,136
2.3	Milestone 2, Filling, Dewatering, and Harvesting Test	\$128,698	\$0	\$128,698
2.3	Milestone 2, Filling, Dewatering, and Harvesting Test	\$121,136	\$0	\$121,136
2.4	Milestone 3, Algae Growth and Lipid Extraction	\$129,949	\$0	\$129,949
2.4	Milestone 3, Algae Growth and Lipid Extraction	\$122,636	\$0	\$122,636
2.5	Milestone 4, Ocean Deployment & Scale-up	\$176,559	\$0	\$176,559
2.5	Milestone 4, Ocean Deployment & Scale-up	\$172,451	\$0	\$172,451
3.1	Technology Transfer and Commercialization Activities	\$26,593	\$0	\$26,593
3.1	Technology Transfer and Commercialization Activities	\$78,057	\$0	\$78,057
Total		\$793,576	\$6,423	\$799,999

PIER FUNDING BY TASK

PIER Funding (\$)		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total
Task 1	Project Administration Activities										
1.1	Attend Kick-off Meeting	676	188	500							\$1,364
1.1	Attend Kick-off Meeting	615	461	600							\$1,176
1.2	Critical Project Review Meetings	2,000	556	2,000							\$4,557
1.2	Critical Project Review Meetings	1,524	476	2,000							\$4,000
1.3	Final Meeting	1,277	355	2,000							\$3,632
1.3	Final Meeting	973	304	2,000							\$3,277
1.4	Monthly Progress Reports	16,792	4,668								\$21,460
1.4	Monthly Progress Reports	12,795	3,996								\$16,792
1.5	Final Report	10,082	2,803								\$12,885
1.5	Final Report	7,682	2,399								\$10,082
1.6	Identify and Obtain Matching Funds	0	0	0	0	0	0	0	0	0	\$0
1.7	Identify and Obtain Required Permits	0	0	0	0	0	0	0	0	0	\$0
1.8	Establish the PAC (optional)										\$0
1.9	Conduct PAC Meetings (optional)										\$0
	Administration Activities Subtotals	\$30,827	\$8,570	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0	\$43,897
Task 2	Project Technical Activities										
2.1	Set up Wet Lab & Outdoor Tanks	14,959	4,727			25,300	111,717				\$156,703
		84,988	26,545		11,300	14,000					\$136,832
2.2	Milestone 1, OMEGA Integrity Tests	14,959	4,443			9,500	102,276				\$131,177
2.2	Milestone 1, OMEGA Integrity Tests	89,639	27,997		3,000	6,600					\$127,136
2.3	Milestone 2, Filling, Dewatering, and Harvesting Test	15,360	4,562			3,500	105,276				\$128,698
2.3	Milestone 2, Filling, Dewatering, and Harvesting Test	89,639	27,997			3,500					\$121,136
2.4	Milestone 3, Algae Growth and Lipid Extraction	14,959	4,443			5,000	105,548				\$129,949
2.4	Milestone 3, Algae Growth and Lipid Extraction	89,639	27,997			6,000					\$122,636
2.5	Milestone 4, Ocean Deployment & Scale-up	14,959	4,510			11,876	145,214				\$176,559
2.5	Milestone 4, Ocean Deployment & Scale-up	122,357	38,217			11,877					\$172,451
3.1	Technology Transfer and Commercialization Activities	20,808	5,785								\$26,593
3.1	Technology Transfer and Commercialization Activities	59,479	18,677								\$78,057
	Technical Activities Subtotals	\$96,002	\$28,469	\$0	\$0	\$55,176	\$570,032	\$0	\$0	\$0	\$749,679
		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total
	PIER Reimbursable Totals	\$126,829	\$37,039	\$4,500	\$0	\$55,176	\$570,032	\$0	\$0	\$0	\$793,576
	Percent of the Total	16%	5%	1%	0%	7%	72%	0%	0%	0%	100%

MATCH FUNDING BY TASK

Match Funding (\$)		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total	
Task 1	Project Administration Activities											
1.1	Attend Kick-off Meeting										\$0	
1.2	Critical Project Review Meetings										\$0	
1.3	Final Meeting										\$0	
1.4	Monthly Progress Reports										\$0	
1.5	Final Report										\$0	
1.6	Identify & Obtain Matching Funds										\$0	
1.7	Identify & Obtain Required Permits	4,121	1,302					1,000			\$6,423	
1.7	Identify & Obtain Required Permits	4,133	1,290					1,000			\$6,423	
1.8	Establish the PAC (optional)										\$0	
1.9	Conduct PAC Meetings (optional)										\$0	
	Administration Activities Subtotals	\$4,121	\$1,302	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$6,423	
Task 2	Project Technical Activities											
2.1	Set up Wet Lab & Outdoor Tanks										\$0	
2.2	Milestone 1, OMEGA Integrity Tests										\$0	
2.3	Milestone 2, Filling, Dewatering, and Harvesting Test										\$0	
2.4	Milestone 3, Algae Growth and Lipid Extraction										\$0	
2.5	Milestone 4, Ocean Deployment & Scale-up										\$0	
3.1	Technology Transfer and Commercialization Activities										\$0	
	Technical Activities Subtotals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total	
Match Funds Totals		\$4,121	\$1,302	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$6,423	
Percentage of the Total		64%	20%	0%	0%	0%	0%	16%	0%	0%	100%	